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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,119	09/14/2001	Peter Ekberg	0104-347P	1221
2292	7590	03/11/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			MOHAMEDULLA, SALEHA R	
			ART UNIT	PAPER NUMBER
			1756	

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/869,119

Applicant(s)

EKBERG, PETER

Examiner

Saleha R. Mohamedulla

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 092501; 062501.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claims 1-22 are pending.

Election/Restriction

1. The restriction requirement dated September 26, 2003 is withdrawn in view of Applicant's remarks. Claims 1-22 are examined.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-22 are rejected under 35 U.S.C. 102(b) as being anticipated by US# 5,815,685 to Kamon.

Kamon teaches a light proximity correction system with a design data input unit for inputting data of a circuit pattern, a data compression unit for compressing the design data input via the design data input unit, an optical image formation unit for forming an optical projection image used to transfer a pattern onto a wafer according to the design data input via the design data input unit, a prediction unit for predicting the size of the pattern which will be transferred onto the wafer, the prediction being performed on the basis of the projection image formed by the optical image formation unit, a comparison unit for calculating the difference between the size of the transferred pattern predicted by the prediction unit and the size of the pattern designated by the design data input via the design data input unit, a correction unit for correcting

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the design data compressed by the data compression unit by an amount equal to the difference determined by the comparison unit, a data expansion unit for expanding the data corrected by the correction unit, and a corrected data output unit for outputting the data expanded by the data expansion unit (col.1, line 60 – col. 2, line 15). Kamon also teaches a method of correcting light proximity effect which occurs during a process of transferring a pattern onto a wafer, the correction of the light proximity effect being performed on the basis of design data of a circuit pattern, thereby generating corrected data, performing electron beam exposure according to the corrected data thereby producing a mask pattern, performing light exposure through the mask pattern thereby transferring the mask pattern onto a wafer and processing the wafer (col. 2, lines 27-38). Kamon also teaches compressing design data of a circuit pattern, forming an optical projection image used to transfer a pattern onto a wafer according to design data, predicting the size of the pattern which will be transferred onto the wafer, the prediction being performed on the basis of the projection image formed in the previous step, correcting the design data by an amount equal to the difference between the predicted size of the transferred pattern and the size of the pattern designated by the design data, expanding the corrected data and outputting the expanded data (col. 2, lines 15-25). The design data for the circuit pattern is the mask (col. 12, lines 25-50). Kamon also teaches exposure using UV light (col. 1, lines 20-25). Because Kamon teaches finding the deviation difference in the patterns, Kamon teaches finding the statistical mean.


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Conclusion

3. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Saleha Mohamedulla whose telephone number is (571) 272-1387. The Examiner can normally be reached Monday-Friday, from 8:00 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mark Huff, can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Saleha R. Mohamedulla
Patent Examiner
Technology Center 1700
March 3, 2004